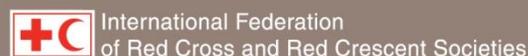


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# Emergency Plan of Action Final Report

## DPR Korea: Floods and Landslides



<b>DREF operation</b>	<b>Operation n° MDRKP012</b>
<b>Date of Issue:</b> 19 May 2019	<b>Glide number:</b> <a href="#">FL-2018-000144-PRK</a>
<b>Date of disaster:</b> 28 August 2018	
<b>Operation start date:</b> 17 September 2018	<b>Operation end date:</b> 17 February 2019
<b>Host National Society:</b> Democratic People's Republic of Korea Red Cross Society (DPRK RCS)	<b>Operation budget:</b> CHF 383,123
<b>Number of people affected:</b> 581,268 people	<b>Number of people assisted:</b> 24,000 people (6,000 families)
<b>N° of National Societies involved in the operation:</b> DPRK RCS	
<b>N° of other partner organizations involved in the operation:</b> The State Committee for Emergency and Disaster Management (SCEDM)	

## A. SITUATION ANALYSIS

### Description of the disaster

Heavy downpours which started on 28 August 2018 caused large-scale flooding and landslides to low-lying areas in North and South Hwanghae provinces of the Democratic People's Republic of Korea (DPRK). A total of 76 people lost their lives and 75 people reported missing just after the disaster. Three people were later identified to be alive and the remaining 72 missing people were presumed dead. Over 3,200 houses were destroyed in addition to clinics, schools and kindergartens. Over 10,000 people became displaced since their houses were fully destroyed, partially destroyed, or submerged. Significant damage was also done to water supply systems. Persistent heavy rains (100 mm/hr for several hours) over a 48-hour period caused flash floods in five counties in North Hwanghae and four counties in South Hwanghae provinces, which are located in the southwestern part of the country.

A total of 3,237 houses were affected in the North and South Hwanghae provinces with some partially damaged, some completely destroyed, and others submerged in floodwater. The most affected area was Kumchon County in North Hwanghae province. In total, it is estimated that 10,681 people were displaced and lived with relatives, neighbours, or in temporary shelters. Entire communities were affected, especially those that were close to rivers. In Eup Town, Kumchon County, a landslide destroyed several houses and, in the valley, and over 77 houses were washed away, with a significant loss of life. The government provided population figures for the affected counties, indicating a total of 581,268 people affected, of which 308,070 were in North Hwanghae and 273,198 in South Hwanghae.

At the time of the disaster, DPRK had already been affected by a series of weather-related disasters. The country suffered from a heatwave in July and August 2018, with 13,768 people assisted in South Hamgyong and South Phyongan provinces due to damaged crops and health-related issues associated with heatstroke. Additionally, Typhoon Soulik made landfall on the Korean peninsula on 23 August 2018, bringing rain and winds leading to severe flooding in South Hamgyong and Kangwon provinces, with approximately 60,000 people having been displaced. The combined effects of these events posed a significant negative effect on harvests with potentially high impact on nutrition and health. Three operations were therefore carried out in separate locations by DPRK RCS.

To allow for immediate disaster response, DPRK RCS, with support from the International Federation of Red Cross and Red Crescent Societies (IFRC), requested a DREF allocation of CHF 383,123. This operation focused on supporting DPRK RCS in disaster response activities by mobilizing volunteers and staff in conducting needs assessments, providing non-food items (NFIs), conducting health and water and sanitation interventions, and

providing first aid (FA) and psychosocial support. The operation lasted for five months, longer than a standard DREF operation, which allowed time for lengthy procurement processes for DPRK.

## **Summary of response**

### **Overview of Host National Society**

DPRK RCS volunteers trained in first aid were the first to respond along with provincial, county and municipal authorities in both North and South Hwanghae provinces. The Vice Chairperson of the County People's Committee in Kumchon County, North Hwanghae Province, praised the DPRK RCS for their immediate action in search and rescue, first aid, and transporting the injured to the county hospital. Since the onset of the disaster, volunteers continued to support the Ministry of Public Health (MoPH) and other authorities in providing assistance to the affected population by offering first aid and treatment for injuries including broken limbs, cuts and other traumas. Specially-trained volunteers offered psychological support. This was particularly important due to the number of casualties and the number of people, including children, who are missing, presumed drowned, or washed away by the floods. Health promotion activities were carried out with doctors from the MoPH, emphasizing the prevention and early treatment of communicable diseases. These activities were carried out by DPRK RCS volunteers and community volunteers trained in Community-Based Health and First Aid (CBHFA) methodologies.

To cope with the threat of water-borne disease, the DPRK RCS has pre-positioned NFIs to assist in the event of an emergency. These household items (and other locally-procured NFIs) were distributed to the affected population together with 1,500 copies of emergency water, sanitation and hygiene (WASH) leaflets that explain the storage and treatment of water at household level and the method of using water purification tablets (WPTs). Trained volunteers worked in households and communities, with an emphasis on educational establishments and temporary shelters, promoting the importance of personal hygiene, especially handwashing. Since the government supplied some of the communities with spring water distributed from water trucks, the DPRK RCS concentrated on areas that were not serviced by these trucks. Based on an assessment conducted in North Hwanghae on 7 September 2018 by the Director of the WASH Department and two technicians, government and local authorities had managed to repair the water supply systems in most of the affected urban areas, but there were still needs in rural communities. Additionally, DPRK RCS and IFRC provided chlorine to clean the water supply systems once they had been restored. Provincial authorities and international agencies were very appreciative of this immediate support in the WASH sector to these communities.

Additionally, the DPRK RCS distributed pre-positioned shelter and other household NFIs to assist the affected population. All distributed pre-positioned NFIs were later replenished. To raise the awareness of community people on safe shelter and building back safer before the rehabilitation phase started, 1,000 copies of the Participatory Approach for Safe Shelter Awareness (PASSA) manual were printed and distributed. This manual contributed to the improvement of technical knowledge and skills of the community to build dwellings more resilient to natural disasters.

The DPRK RCS coordinated with local stakeholders, while the IFRC was responsible for coordinating with other international organisations. DPRK RCS and IFRC also conducted several monitoring missions to Kumchon County, North Hwanghae Province. One of the key issues found during the monitoring missions was that the county had not suffered from landslides before, and therefore some people, particularly elderly people, did not take the early warning messages seriously and evacuated at the very last minute. As a result, some of the people trying to evacuate the elders were trapped during the flash floods and landslides and lost their lives. The same lessons were identified during the lessons learned workshop held in Kaesong City at the end of January 2019. The monitoring missions and lessons learned workshop showed the need to strengthen awareness on the risks and to conduct more frequent early warning and early action trainings.

### **Overview of Red Cross Red Crescent Movement in country**

The IFRC has had a country office in DPRK for over twenty years and currently has five delegates in-country comprising the Head of Country Office, the National Society Development/Programme Coordinator, and Health/WASH, Finance, and Disaster Risk Management Delegates. The International Committee of the Red Cross (ICRC) also has a mission in DPRK, and there is close collaboration between IFRC and ICRC.

The IFRC DPRK Country Office (CO) has been engaged with the NS on this disaster since the 3<sup>rd</sup> of September 2018. The IFRC coordinated with other actors through the inter-agency meeting and sectoral working group meetings, including health, WASH, shelter, and disaster risk reduction (DRR) sectors. The IFRC chairs the shelter meetings and co-chairs the DRR meetings together with UNDP. The IFRC is also co-chair of the Humanitarian Country Team (HCT) and, as part of the DRR Working Group, IFRC participates in weekly meetings where updates on emergencies and disasters are shared. The IFRC continuously coordinated with other actors in the country to respond to the needs and avoid duplication of activities.

## Overview of non-RCRC actors in country

The main government actor in disaster response is the State Committee for Emergency Disaster Management (SCEDM), with whom the DPRK RCS coordinated. The main UN actor is the UNDP, and the IFRC maintains regular communication with them with respect to emergencies in-country.

The initial assessment team that visited the affected areas on 4 September 2018 included WHO, UNICEF, UNFPA, WFP, FAO, Concern Worldwide, Handicap International, and representatives from diplomatic missions. Sectoral groups from health, WASH, shelter, DRR, food security, and nutrition were convened with the IFRC as part of the health, WASH, shelter and DRR working groups. A comprehensive, consolidated report was compiled (dated 10 September 2018) and presented to the government.

UNICEF immediately, along with DPRK RCS, released contingency stocks, mainly NFIs and WASH materials, including water purification tablets. UNICEF, WHO and UNFPA donated medical supplies to two county hospitals in the most affected areas.

The Government of DPRK gave early warning and mobilized local government authorities to reduce the possible impact of the disaster. Local government authorities took the lead in evacuation activities, and hence saved the lives of many people. They also provided temporary shelter to the displaced people and requested the assistance of the DPRK RCS and UN agencies for provision of temporary shelter. In addition to this, they released emergency stock including food items and non-food items to meet the primary demand of the flood-affected people. After the emergency response phase, they concentrated efforts on construction of dwellings for the displaced population and rehabilitation of public buildings and infrastructure. As of reporting date, all of the displaced population have moved into the new dwellings and the rehabilitation work is ongoing.

## Needs analysis and scenario planning

### Needs analysis

The floods and landslides were devastating for many people. The precipitation was intense for more than 30 hours and, as shown in **Table 1** below, Kumchon County received the heaviest rain by far.

**Table 1: Precipitation record between 12:00 on 28 August and 19:00 on 29 August 2018**

Province	County	Precipitation (mm)
North Hwanghae	Kumchon	678
	Thosan	380
	Jangpung	373
	Kaesong	367
	Kaepung	367
	Pongchon	557
South Hwanghae	Paechon	248
	Sinwon	243
	Pyoksong	238
	Haeju	184

Findings from the joint assessment showed that Kumchon County, North Hwanghae Province, was the most affected county. The assessment also indicated that there was great need across various sectors, as described below.

### Disaster Risk Reduction (DRR)

Floods are part of a general and worrying trend in the past few years of extreme and highly volatile weather events, including a higher number of heatwaves, typhoons and torrential rains, in combination with increased vulnerability due to deforestation and other factors that can lead to human casualties, widespread damage of infrastructure, and loss of agricultural production. The findings from the joint assessment under DRR indicated the following:

- Early warning systems require further improvements, including greater community training and production of training materials.
- Although geographically dispersed, the damage to infrastructure and land generally occurred in foreseeable high-risk areas defined by adjacency to streams and waterways with lack of sufficient reinforced embankments, near unprotected and/or deforested slopes, or unprotected gullies without measures to slow or regulate water flow.
- River embankments in several areas were insufficient to protect the bursting of banks. Means and techniques employed for river embankments must be enhanced, otherwise repetition of damage remains likely in future events.
- Gully protection through check dams or soil bio-engineering methods was generally not much applied, although these techniques have proven to be successful in reducing water-related risks.

- With forest depletion and degradation, sloping fields are especially prone to land erosion, and if cultivated in unsustainable ways, will degrade further year after year and further exacerbate water-related risks. These risks can concretely be mitigated by agroforestry and forestry initiatives in disaster-prone areas.
- Looking at the volatility of weather conditions and the upcoming winter season, it would be an imperative to ensure that all supports (shelter, WASH and NFIs) are considered with provision for winterization to address the vulnerability, especially for women and children.

The DRR activities mentioned above were not covered under this DREF, but have been included in the 2019 Operational Plan of the IFRC DPRK Country Office, for which IFRC is currently seeking funding.

### **Shelter**

IFRC takes the lead in the shelter sector working group and consolidated the assessment report for shelter. The consolidated data from the joint assessment of the impact of the floods in North and South Hwanghae provinces showed that the residential houses were damaged, as detailed in the **Table 2**, below.

**Table 2: Details of damaged houses**

City/Province	Total		Complete Damage		Partial Damage		Submerged		Displaced people
	Building	Household	Building	Household	Building	Household	Building	Household	
Haeju City	49	76	23	35	26	41	0	0	186
Taetan County	9	13	5	7	4	6	0	0	34
Sinwon County	25	54	6	16	16	35	3	3	112
Pongchon County	302	383	224	280	0	0	78	103	1,269
Chongdan County	166	237	40	54	126	183	0	0	441
<b>S. Hwanghae</b>	<b>551</b>	<b>763</b>	<b>298</b>	<b>392</b>	<b>172</b>	<b>265</b>	<b>81</b>	<b>106</b>	<b>2,042</b>
Pyongsan County	481	861	73	111	0	0	408	750	2,330
Kumchon County	267	882	79	156	0	0	188	726	2,442
Jangpung County	459	731	289	511	170	220	0	0	2,238
Kaesong City	431	649	14	24	37	59	380	566	1,631
<b>N. Hwanghae</b>	<b>1,638</b>	<b>3,123</b>	<b>455</b>	<b>802</b>	<b>207</b>	<b>279</b>	<b>976</b>	<b>2,042</b>	<b>8,641</b>
<b>Total</b>	<b>2,189</b>	<b>3,886</b>	<b>753</b>	<b>1,194</b>	<b>379</b>	<b>544</b>	<b>1,057</b>	<b>2,148</b>	<b>10,683</b>

Additionally, public buildings and kindergartens were also fully and partially destroyed due to the landslides and floods. There were also reports on damaged Ri<sup>1</sup> Clinics but there was a lack of information on the exact numbers.

Many houses and buildings were either completely washed away or partially destroyed as a result of the flash floods and landslides. People took shelter in temporary shelters, with relatives or with neighbors. The assessment also showed that there were needs for tents, tarpaulins, plastic sheeting, and shelter tool kits, as well as for household items, including cooking sets, hygiene kits, and blankets.

Shelter was highlighted as one of the main issues, since so many houses and buildings were destroyed in the floods and landslides. IFRC and DPRK RCS responded to these needs through the distribution of shelter materials and household items, and guidelines for safe shelter awareness.

### **WASH**

During the initial assessment carried out on 4 September 2018 by the joint team, including IFRC, WHO, UNICEF, UNFPA, WFP, FAO, Concern Worldwide, Handicap International, and representatives from diplomatic missions, it was reported that provision of safe water was a major problem. Spring water was being distributed by local authorities to the affected population at the initial stage using water trucks, although it had reportedly not been treated. No proper waterborne disease surveillance system was in place. It was reported that there was an increase of diarrhea cases by 45 per cent, but it was not known to what relative statistic this increase was measured. In Kumchon County, water supply was a major concern, as water collected from streams was being supplied by trucks, but water treatment was reportedly not being performed. As per the opinion of key interviewees, hygiene kits were raised as the major requirement. A total of 500 boxes of hygiene kits were immediately distributed to the most affected families in Kumchon County together with other household items, and this response contributed to the stabilization of the lives of the affected families.

### **Health**

Through the assessment, it became clear that Kumchon County, North Hwanghae Province, was one of the most affected areas, with 42 deaths, 42 injured and 31 missing, mainly children. Several health institutions of Ri level were

<sup>1</sup> A Ri is usually composed of several villages.

completely or partially destroyed resulting in no access to appropriate health services for the local people. Thus, many injured people were transported to the county hospital to receive treatment. At least 18 clinics and 1 hospital were damaged in the floods in North and South Hwanghae provinces.

At the early stage of the floods, 75 volunteers were mobilized to offer FA and disease prevention health messages to the those affected by the disaster; however, this was not enough compared to the growing risk of injuries, concerns and anxieties, and potential outbreak of communicable diseases among those living in temporary shelters. The lack of medicines was also raised as a major requirement.

The general situation required scaling up of health activities, such as training of volunteers on FA, Epidemic Control for Volunteers (ECV), and psychological support, distribution of FA kits and information, education and communication (IEC) materials to frontline volunteers, and supply of FA consumables to FA posts, all of which played a crucial role in addressing the immediate health needs of the community people. In full consideration of the existing capacity (human, material and financial resources), DPRK RCS and the IFRC CO targeted the Eup area, Kumchon County for health interventions under the DREF.

### **Food Security and Nutrition**

Findings from the joint assessment showed significant damage to cropland in the affected areas (see **Table 3**). This would not only have an impact on the immediately-affected areas in North and South Hwanghae provinces, but also on the country as a whole. The agricultural sector in DPRK had already suffered from a heatwave and floods following Typhoon Soulik in 2018. Early estimations indicated a 30-50 per cent loss of harvest in 2018, but more recent figures showed a 9-10 per cent loss compared to 2017, although the 2017 harvest was also lower than that of 2016. The 2018 harvest was the lowest in over a decade and this has led to a food shortage, triggering the government to request additional support in 2019 from the international organisations based in DPRK. No food security or nutrition activities were covered under this DREF, but are included in the 2019 Operational Plan of the IFRC DPRK Country Office, for which IFRC is currently seeking funding.

**Table 3: Damage to arable land**

Location	Area (ha)
<b>S. Hwanghae Province</b>	<b>7,540</b>
Haeju City	56
Taetan County	2,337
Sinwon County	41
Chongdan County	1,409
Pongchon County	3,697
<b>N. Hwanghae Province</b>	<b>9,269</b>
Pyongsan County	643
Kumchon County	3,004
Tosan County	2,616
Kaesong City	1,648
Jangpung County	1,358
<b>Damage of arable land (hectare)</b>	<b>16,809</b>
<b>Paddy Rice (hectare)</b>	<b>7,946</b>



Destroyed farmland area. (Photo: John Fleming/IFRC)

### **Risk analysis**

At the early stages of this operation, there were risks of more heavy rains and landslides. In the case of more heavy rainfall in these areas, it was believed that this could cause further delays to the operation due to inaccessibility of the affected areas. The DPRK RCS worked closely with local authorities and the local emergency management agency to ensure accessibility to the affected areas, and it was reported that volunteers walked for over six hours to deliver NFIs to areas that were cut off by the floods and landslides.

In addition, lengthy procurement procedures due to necessary approvals by the 1718 Sanctions Committee were identified as risk since it could delay the procurements for this operation. To mitigate this risk, the DREF operation was extended to five months. Further mitigations were taken through local procurements and eventually IFRC did not need to seek any exemptions.

## **B. OPERATIONAL STRATEGY**

### **Proposed strategy**

This operation was focused on supporting DPRK RCS in disaster response activities by mobilizing volunteers and

staff in conducting needs assessments, providing of NFIs, conducting health and water and sanitation interventions, and providing first aid and psychosocial support.

Kumchon County was targeted through WASH and health activities. Both North and South Hwanghae provinces were targeted through NFI distributions. The decision to focus on these areas was made in coordination with the government to avoid duplication by other organisations.

Affected people whose houses were completely destroyed were targeted as a priority. Additionally, the selection criteria included single-headed households, households with many children, and households with elderly or pregnant members.

### **Shelter**

DPRK RCS distributed stocks that were available in their warehouses. Approximately 24,000 people were reached through the distribution of items as detailed in **Table 4**, below.

**Table 4: Total Distribution Plan**

No.	Item	S. Hwanghae	N. Hwanghae	Total	Remarks
1.	Tarpaulin	0	1200	1,200	2 per family
2.	Blanket	6,300	17,417	23,717	4 per family
3.	Blanket cover	303	684	987	1 per family, will target the most vulnerable
4.	Hygiene kit	23	477	500	1 per family
5.	Jerrycan	2,659	4,608	7,267	2 per family
6.	Kitchen set	295	692	987	1 per family

DPRK RCS printed and distributed 1,000 copies of the PASSA manual to flood-affected areas in North and South Hwanghae provinces.

### **WASH**

Besides hygiene kits and jerrycans as noted in **Table 4** above, 10,000 pieces of soap were procured and distributed to 16 childcare centers, two schools, and seven health facilities in Eup area of Kumchon County. 304,000 WPTs were distributed to the above same institutions and to the families living in the temporary shelters for treatment of potentially contaminated drinking water delivered by either the water supply systems or water trucks. Hygiene promotion (HP) was conducted by trained volunteers in the targeted areas (i.e Eup area of Kumchon County) who delivered key hygiene messages, such as proper handwashing, safe disposal of human and household waste, and proper use of WPTs. The volunteers also monitored distribution and usage of the hygiene kits, WPTs, soap, and other relief items in the institutions and by individual families. DPRK RCS also provided chlorine for cleaning and restoring the water supply system in Kumchon County. The government undertook rehabilitation of the damaged water supply pipelines and water trucking.

### **Health**

Based on lessons learned from previous disasters, DPRK RCS together with the IFRC CO made immediate and prompt health interventions, such as FA, psychological support, referrals, and health promotion on epidemic prevention and control.

A total of 90 volunteers were newly trained on FA, ECV, and psychological support. A total of 165 copies of IEC materials (FA flip charts, FA manuals, and ECV manuals & toolkits) were printed and distributed to the 165 volunteers (75 existing and 90 new) that were mobilized in the emergency response. These volunteers also received FA kits to be utilized for any FA emergencies. In addition, 6 FA posts in the target areas became fully operational with training and supply of FA consumables, such as FA kits, bandages, stretchers, and FA backpacks to provide quality FA services to the target population, particularly women, children, people with disabilities, and the elderly.

With new and updated knowledge and skills from the training and supply of health materials, the volunteers were able to do more and do better in reaching the most vulnerable people affected by the disaster through health interventions.



Volunteers offering FA and psychological support to injured woman in Kumchon County, North Hwanghae Province, September 2018. (Photo: DPRK RCS)

## C. DETAILED OPERATIONAL PLAN



### Shelter

People reached: 24,000 people

Male: 10,800

Female: 13,200

**Outcome 1: Communities in disaster and crisis affected areas restore and strengthen their safety, well-being and longer-term recovery through shelter and settlement solutions**

Indicators:	Target	Actual
# of people reached with safe and adequate shelter and settlement	24,000	24,000

**Output 1.1: Short, medium and long-term shelter and settlement assistance is provided to affected households**

Indicators:	Target	Actual
# of people received non-food items	24,000	24,000

#### Narrative description of achievements

Approximately 6,000 households (24,000 people) were reached through provision of shelter and/or household items, such as tarpaulins, blankets, hygiene kits, jerrycans, and/or kitchen sets. The replenishment process of NFIs has been completed. A total of 1,000 copies of the PASSA manual were printed and distributed, and these were used to give the flood-affected population build-back safer messages.

#### Challenges

There was some difficulty in installing temporary shelters for people affected by the floods as there were not enough volunteers who had been trained in emergency shelter installation. The National Disaster Response Team (NDRT) gave short, on-site training to volunteers and community people on the method of temporary shelter installation.

#### Lessons Learned

Awareness raising activities should not only target the volunteers but also the community people to ensure prompt action when disaster occurs. The DPRK RCS will ensure in the future that the trained volunteers disseminate their knowledge and skills learnt from the trainings to the people of the respective communities.



### Water, sanitation and hygiene

People reached: 10,650 people

Male: 4,899

Female: 5,751

**Outcome 3: Vulnerable people have increased access to appropriate and sustainable water, sanitation and hygiene services**

Indicators:	Target	Actual
% of population in affected communities using appropriate water, sanitation and hygiene services in humanitarian context	90%	90%

**Output 3.1: Communities are provided by NS with improved access to safe water**

Indicators:	Target	Actual
# of WPT procured and distributed	304,000	304,000
# of households provided with jerry cans to collect water	3,500	3,633
# of households provided with safe water in targeted communities through chlorination of the rehabilitated pipelines	11,000	11,000

**Output 3.1.3: NS promotes positive behavioural change in personal and community hygiene among targeted communities**

Indicators:	Target	Actual
# of hygiene communication plans developed	3	3
# of RC volunteers trained to implement activities from communication plan	30	30
# of hygiene kits distributed and replenished	500	500
# of health and educational institutions provided with soaps for handwashing	25	25
# of IEC materials for RC volunteers printed	100	100
# of IEC materials for schoolchildren printed	100	100

### Narrative description of achievements

The DPRK RCS conducted a detailed assessment between 7 and 9 September 2018 to find out the needs. The main water supply pipelines (7,000 meters) were cut out, and the government provided water trucking and rehabilitated the pipelines at the same time. The community was requesting jerry cans, buckets and hygiene kits. Chlorine was needed to flush away the remnants in the pipes.

DPRK RCS distributed the affected families in Eup area, Kumchon County, with 7,267 jerry cans (2 per family) to 3,633 families, and 500 boxes of hygiene kits (1 per family for one-month use, consisting of body soaps, laundry soaps, toothpaste and toothbrushes, towels and toilet paper, sanitary pads, mirror and comb, and nail clipper), and trained them on the use of the items by mobilizing its volunteers.

Hygiene promotion training for 30 volunteers was held in Kaesong City between 11 and 12 October 2018 to raise the awareness of the participants on the importance of personal and community hygiene in times of disaster. In addition, 200 sets of IEC materials (one set of IEC materials consists of flipchart and manual) for hygiene promotion and education (100 sets for volunteers and 100 sets for schoolchildren) were distributed to the affected communities of Up town of Kumchon County.

The trained volunteers implemented HP activities in affected areas of Up town of Kumchon County, especially targeting the population living in emergency shelters, from the developed communication plan. The focus of hygiene promotion was put on prevention of water-borne diseases and environmental contamination to avoid a secondary disaster. A total of 10,000 bars of soaps were distributed to 25 health and educational institutions including clinics, nurseries, kindergartens, and schools in order to enable the vulnerable population to practice frequent handwashing. An estimated 2 tons of HTH chlorine was provided to the Up town of Kumchon County for disinfection of the water supply pipeline. Chlorination of the water supply pipeline and water sources was done by the County Water and Sanitation Station with the technical supervision by experts of County Hygiene and Anti-epidemic Station.

As a result, 90 per cent of the total targeted population now has access to safe and clean water through rehabilitated pipelines, and the remaining 10 per cent use traditional water sources, such as wells, according to the assessment report from the branch.

### Challenges

As there were no prepositioned stocks of HTH chlorine, and as it took some time to go through the procurement process, DPRK RCS had some difficulties in providing safe and clean water to the affected population after the disaster.

### Lessons Learned

It is strongly recommended that some amount of HTH chlorine be prepositioned as emergency stocks in warehouses.



### Health

People reached: 10,650 people

Male: 4,899

Female: 5,751

### Outcome 3: Vulnerable people`s health and dignity are improved through increased access to appropriate health services

Indicators:	Target	Actual
# of people reached by NS with services to reduce relevant health risk factors	10,650	10,650

### Output 4.1: Communities are supported by NS to effectively respond to health and psychological needs during an emergency

Indicators:	Target	Actual
# of RC volunteers newly trained on FA, ECV and psychological support	90	90
# of people reached by FA service and health promotion	10,650	10,650

### Narrative description of achievements

According to the plan, 90 volunteers were newly trained on FA, ECV, and psychological support, and as a result, 165 volunteers (75 existing and 90 new) were mobilized in health in emergency activities.

A total of 165 FA kits were procured and distributed to 165 volunteers who worked on the frontlines to offer FA and

psychological support to the injured people, refer sick people to the county hospital, and deliver health messages with a focus on FA and prevention of communicable diseases, such as diarrhea and acute respiratory infections. Also, 165 copies of IEC materials, such as FA flip charts, FA manuals and ECV manuals and toolkits, were printed and distributed to the volunteers for refreshing the knowledge and as the key means for health promotion. With the supply of FA consumables, 6 FA posts in the target areas became fully operational and able to offer quality FA services to the people in need.

Thanks to active and energetic devotions of the volunteers, more than 10,650 local people in the target areas were benefited by health interventions. At least one member in each household in the target community was equipped with FA and ECV knowledge and skills, and this has resulted in better preparedness of the community people for future disasters.

### Challenges

Compared to previous disasters, the injury rate, such as bleeding and fracture, was considerably higher during this specific disaster, a mixture of floods and landslides. One of the main reasons for this was that the local population was not prepared for landslides since they had little experience with it in past years. As such, local people, particularly the elderly, women and children, tried to evacuate to a safer place only at the last moment, causing more injuries and trauma. Despite the immediate response from DPRK RCS volunteers residing in the communities, it became evident that more volunteers were needed to cope with the immediate and midterm health risks.

FA posts were already established in the target communities; however, they were not able to function properly during disaster, simply due to shortages of FA consumables. Such a gap was identified during the assessment and, with support from DREF, these FA posts were provided with FA consumables and became fully operational, offering quality FA services to the disaster victims.

### Lessons Learned

More efforts should be made for preparedness, as well as response. If community people were better prepared for disasters like floods and landslides, health consequences could be reduced. For better preparedness, awareness building on health in disasters among community people should continue through trained DPRK RCS volunteers. To be able to respond more effectively and efficiently to future disasters, regular supply of FA consumables to the FA posts should be seriously considered.

## Effective, credible and accountable IFRC

### Outcome S4: The IFRC enhances its effectiveness, credibility and accountability

Indicators:	Target	Actual
# of lesson learned workshops organized	1	1

### Narrative description of achievements

A lesson learned workshop was conducted in January 2019 in Kaesong City, North Hwanghae Province, targeting the county branch staff, volunteers, community leaders, and people of Kumchon, Jangpung and Phyongsan Counties, and Kaesong City of North Hwanghae Province. The purpose of the workshop was to let the participants share their experiences and lesson learned from the operation. The participants themselves identified the gaps in their disaster preparedness and response and sorted out the measures to be taken for future disaster response operations.

### Challenges

No particular challenges were encountered.

### Lessons Learned

The lessons learned workshop was very useful in analyzing the challenges and successes for both the NS headquarters (HQ) and branches. The workshop provided not only a good platform for the NS HQ to adapt for the future, but also a chance for the branches to reflect and adapt for future disasters.

## Strengthen National Society

**Outcome 1: National Society capacity building and organizational development objectives are facilitated to ensure that National Societies have the necessary legal, ethical and financial foundations, systems and structures, competences and capacities to plan and perform**

Indicators:	Target	Actual
# of RC volunteers trained on FA and hygiene promotion for more effective volunteer engagement in emergencies	120	120

**Output S1.1.4: National Societies have effective and motivated volunteers who are protected**

Indicators:	Target	Actual
# of volunteers provided with deployment kit/RC jacket	150	150

### Narrative description of achievements

A total number of 150 deployment kits for volunteers were procured and distributed. These deployment kits contributed to improving the working conditions and ensuring the quality of volunteers' activities.

### Challenges

The volunteer deployment kits were in great need for volunteers but the procurement procedure took some months until the kits were distributed to the volunteers. The volunteers could not use the materials during the most critical times of the operation.

The volunteers worked hard to fulfill their tasks, like evacuation and early action, first aid, health and hygiene promotion, distribution of NFIs, and other mitigation activities during the operation, but they struggled with lack of self-protection knowledge and skills. There were no reports of volunteer casualties, but staff and volunteers spoke about the provision of volunteer protection and basic working conditions for volunteering in emergencies.

### Lessons Learned

Regarding the late distribution of volunteer deployment kits, DPRK RCS is considering including volunteer deployment kits in the prepositioning of relief materials. The headquarters is seeking a funding source or other resources for volunteer deployment kits and brainstorming to implement it.

The issue of lack of risk awareness and self-protection knowledge and skills was raised in many cases, such as during the Organizational Capacity Assessment and Certificate (OCAC) self-assessment and previous emergency operations. The DPRK RCS has been developing the Stay Safe curriculum and training of volunteers since last year with the support of ICRC, and this activity will continue to grow until it is included in the basic training for volunteers.

## D. THE BUDGET

CHF 383,123 was allocated for DPRK RCS to respond to the needs of 24,000 affected people (6,000 households) in Kumchon County and both North and South Hwanghae provinces. Upon the end of the operational timeframe, a total of CHF 334,247 has been utilized, equivalent to 87 per cent of the budget. The balance of CHF 48,876 will be reimbursed to DREF. A financial report is appended to this narrative report. [click [here](#)]

### Budget/Expenditure Analysis

All activities from the emergency plan of action were completed as planned for the DREF operation. Most budget lines have a positive variance. For the relief items, all items were procured as planned but some at cheaper prices than budgeted for. Some Utensils & Tools were provided thanks to the generous in-kind donation of 3,000 20-L jerrycans (out of the 7,000 budgeted for) from the British Red Cross. The expenditure for Other Supplies & Services (i.e., soap) was booked under WASH. A deficit is shown under Teaching Materials for printing of first aid manuals and flipcharts, and for ECV manuals and toolkits because the initial plan was to print 165 copies of each, but due to savings under other budget lines, 250 copies of each were printed. Some costs were occurred under Financial Charges due to bank fees and currency revaluation. Some funds were saved under Logistics, Transport & Storage thanks to joint shipping and storage of items over two different DREF operations.



Click here for:

- [Previous Appeals and updates](#)
- [Emergency Plan of Action \(EPoA\)](#)

**For further information, specifically related to this operation please contact:**

**In the Democratic People's Republic of Korea Red Cross Society**

- **Kim Jong Ho**, DM director; phone: +850 2 4350; email: [dprk-rc@star-co.net.kp](mailto:dprk-rc@star-co.net.kp)

**In the IFRC DPRK Country Office, Pyongyang**

- **Mohamed Babiker**, head of country office; phone: +850 191 250 1149; email: [mohamed.babiker@ifrc.org](mailto:mohamed.babiker@ifrc.org)
- **Joseph Muyambo**, NSD & programme coordinator; phone: +850 191 250 7710; email: [joseph.muyambo@ifrc.org](mailto:joseph.muyambo@ifrc.org)
- **Daniel Wallinder**, disaster risk management delegate; phone: +850 191 250 7921; email: [daniel.wallinder@ifrc.org](mailto:daniel.wallinder@ifrc.org)

**In the IFRC Asia Pacific Regional Office, Kuala Lumpur**

- **Alka Kapoor**, acting deputy regional director; email: [alka.kapoor@ifrc.org](mailto:alka.kapoor@ifrc.org)
- **Necephor Mghendi**, head of disaster and crisis unit; email: [necephor.mghendi@ifrc.org](mailto:necephor.mghendi@ifrc.org)
- **Tanya Grygaski**, interim operations coordinator; email: [OpsCoord.APRO@ifrc.org](mailto:OpsCoord.APRO@ifrc.org)

**In IFRC Geneva**

- **Nelson Castano**, manager, operations coordination; email: [nelson.castano@ifrc.org](mailto:nelson.castano@ifrc.org)

**For IFRC Resource Mobilization and Pledges Support**

- **IFRC Asia Pacific Regional Office: Nabila Nasir-Myers**, coordinator, marketing and partnerships; email: [nabila.nasirmyers@ifrc.org](mailto:nabila.nasirmyers@ifrc.org)

**For Performance and Accountability Support (planning, monitoring, evaluation and reporting enquiries)**

- **IFRC Asia Pacific Regional Office: Mursidi Unir**, acting PMER manager; email: [mursidi.unir@ifrc.org](mailto:mursidi.unir@ifrc.org)

## How we work

All IFRC assistance seeks to adhere to the **Code of Conduct** for the International Red Cross and Red Crescent Movement and Non-Governmental Organizations (NGO's) in Disaster Relief and the **Humanitarian Charter and Minimum Standards in Humanitarian Response (Sphere)** in delivering assistance to the most vulnerable. The IFRC's vision is to inspire, encourage, facilitate and promote at all times all forms of humanitarian activities by National Societies, with a view to preventing and alleviating human suffering, and thereby contributing to the maintenance and promotion of human dignity and peace in the world.

The IFRC's work is guided by Strategy 2020 which puts forward three strategic aims:



**Save lives.**  
protect livelihoods,  
and strengthen recovery  
from disaster and crises.



Enable **healthy**  
and **safe** living.



Promote social inclusion  
and a culture of  
**non-violence** and peace.

# DREF Operation

FINAL FINANCIAL REPORT

Selected Parameters			
Reporting Timeframe	2018/9-2019/4	Operation	MDRKP012
Budget Timeframe	2018/9-2019/2	Budget	APPROVED

Prepared on 16/May/2019

All figures are in Swiss Francs (CHF)

## MDRKP012 - DPR Korea - Floods and Landslides

Operating Timeframe: 17 Sep 2018 to 17 Feb 2019

### I. Summary

<b>Opening Balance</b>	<b>0</b>
<b>Funds &amp; Other Income</b>	<b>383,123</b>
DREF Allocations	383,123
<b>Expenditure</b>	<b>-334,247</b>
<b>Closing Balance</b>	<b>48,876</b>

### II. Expenditure by area of focus / strategies for implementation

Description	Budget	Expenditure	Variance
AOF1 - Disaster risk reduction	37,808	32,003	5,804
AOF2 - Shelter	232,703	222,606	10,096
AOF3 - Livelihoods and basic needs			0
AOF4 - Health	32,046	29,036	3,010
AOF5 - Water, sanitation and hygiene	54,848	34,410	20,438
AOF6 - Protection, Gender & Inclusion			0
AOF7 - Migration			0
<b>Area of focus Total</b>	<b>357,403</b>	<b>318,055</b>	<b>39,348</b>
SFI1 - Strengthen National Societies	15,070	16,192	-1,122
SFI2 - Effective international disaster management	10,650		10,650
SFI3 - Influence others as leading strategic partners			0
SFI4 - Ensure a strong IFRC			0
<b>Strategy for implementation Total</b>	<b>25,720</b>	<b>16,192</b>	<b>9,528</b>
<b>Grand Total</b>	<b>383,123</b>	<b>334,247</b>	<b>48,876</b>

# DREF Operation

FINAL FINANCIAL REPORT

Selected Parameters			
Reporting Timeframe	2018/9-2019/4	Operation	MDRKP012
Budget Timeframe	2018/9-2019/2	Budget	APPROVED

Prepared on 16/May/2019

All figures are in Swiss Francs (CHF)

## MDRKP012 - DPR Korea - Floods and Landslides

Operating Timeframe: 17 Sep 2018 to 17 Feb 2019

### III. Expenditure by budget category & group

Description	Budget	Expenditure	Variance
<b>Relief items, Construction, Supplies</b>	<b>248,890</b>	<b>231,991</b>	<b>16,899</b>
Shelter - Relief	18,000	14,572	3,428
Clothing & Textiles	145,000	142,642	2,358
Water, Sanitation & Hygiene	18,500	16,426	2,074
Medical & First Aid	7,950	7,945	5
Teaching Materials	15,840	25,837	-9,997
Utensils & Tools	41,600	24,570	17,030
Other Supplies & Services	2,000		2,000
<b>Logistics, Transport &amp; Storage</b>	<b>32,000</b>	<b>23,197</b>	<b>8,803</b>
Storage	7,000	218	6,782
Distribution & Monitoring	10,000	10,809	-809
Transport & Vehicles Costs	10,000	10,732	-732
Logistics Services	5,000	1,438	3,562
<b>Personnel</b>	<b>25,650</b>	<b>19,054</b>	<b>6,596</b>
International Staff		62	-62
National Staff	1,500	821	679
National Society Staff	10,000	2,967	7,033
Volunteers	14,150	15,204	-1,054
<b>Workshops &amp; Training</b>	<b>17,500</b>	<b>14,006</b>	<b>3,494</b>
Workshops & Training	17,500	14,006	3,494
<b>General Expenditure</b>	<b>35,700</b>	<b>25,599</b>	<b>10,101</b>
Travel	6,000	1,824	4,176
Information & Public Relations	23,700	14,554	9,146
Communications	6,000	5,906	94
Financial Charges		3,315	-3,315
<b>Indirect Costs</b>	<b>23,383</b>	<b>20,400</b>	<b>2,983</b>
Programme & Services Support Recover	23,383	20,400	2,983
<b>Grand Total</b>	<b>383,123</b>	<b>334,247</b>	<b>48,876</b>